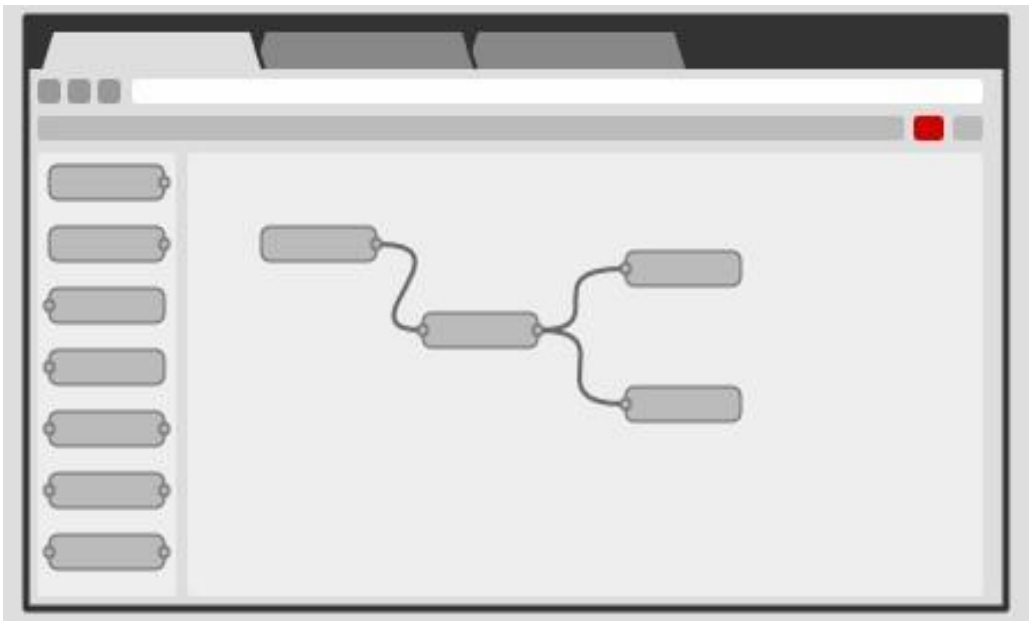
Team ID	**PNT2022TMID52229**
Project Name	**Project –IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE**

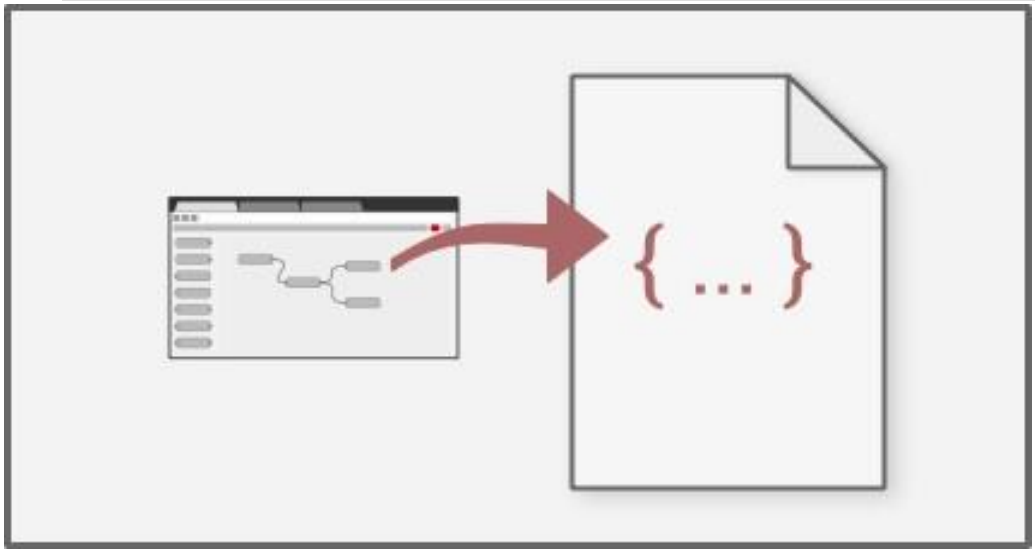
Creating NODE-RED Service

- Node-RED is a flow-based development tool for visual programming developed originally by IBM for wiring together hardware devices, APIs and online services as part of the Internet of Things.
- Node-RED provides a web browser-based flow editor, which can be used to create JavaScript functions. Elements of applications can be saved or shared for re-use.
- The runtime is built on Node.js.
- The flows created in Node-RED are stored using JSON.

Social Development:

- The flows created in Node-RED are stored using JSON which can be easily imported and exported for sharing with others.
- An online flow library allows you to share your best flows with the world.



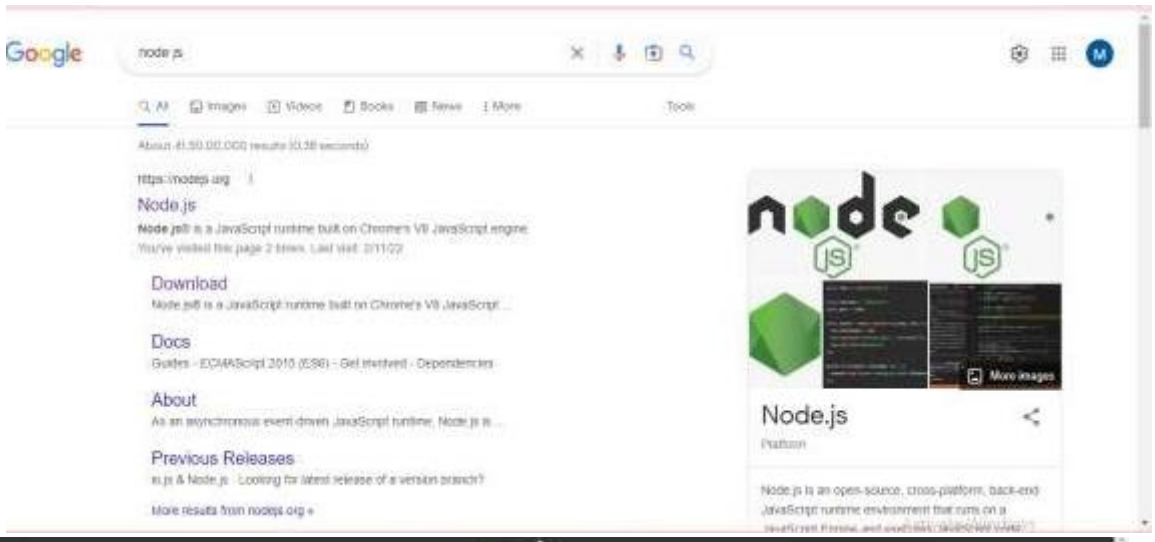


Step1: go to nodejs website and download .msi file in downloads page.

Step2:run the .msi file and install the nodejs.

Step3: install nodered in command prompt: npm install -g --unsafeperm node-red

Step4: type node-red in cmd and u will get the local server link, just open it.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Latest LTS Version: 18.12.0 (includes npm 8.19.2)
Download the Node.js source code or a pre-built installer for your platform, and start developing today.
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Recommended For Most Users
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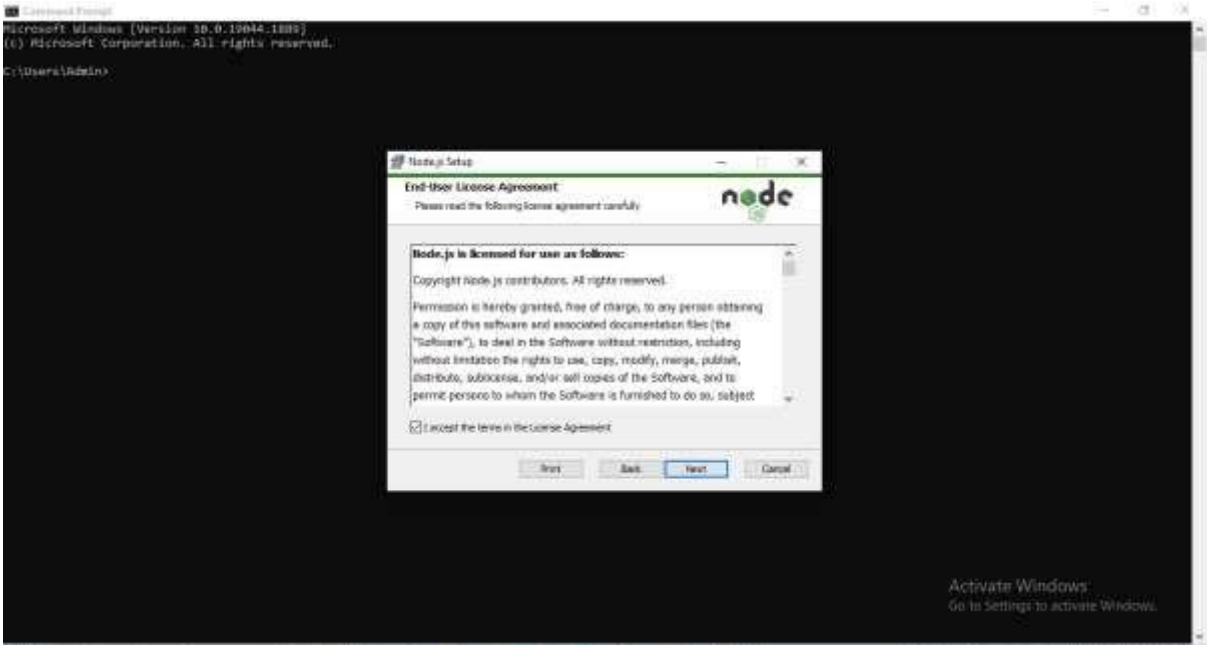
Latest Features
Windows Installer
macOS Installer
Source Code
Windows Installer (.msi)
32-bit
64-bit


Microsoft Windows [Version 10.0.19044.1889]
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C:\Users\Admin>
Node.js Setup
End-User License Agreement
Please read the following license agreement carefully
Node.js is licensed for use as follows:
Copyright Node.js contributors. All rights reserved.
Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject
I accept the terms in the License Agreement
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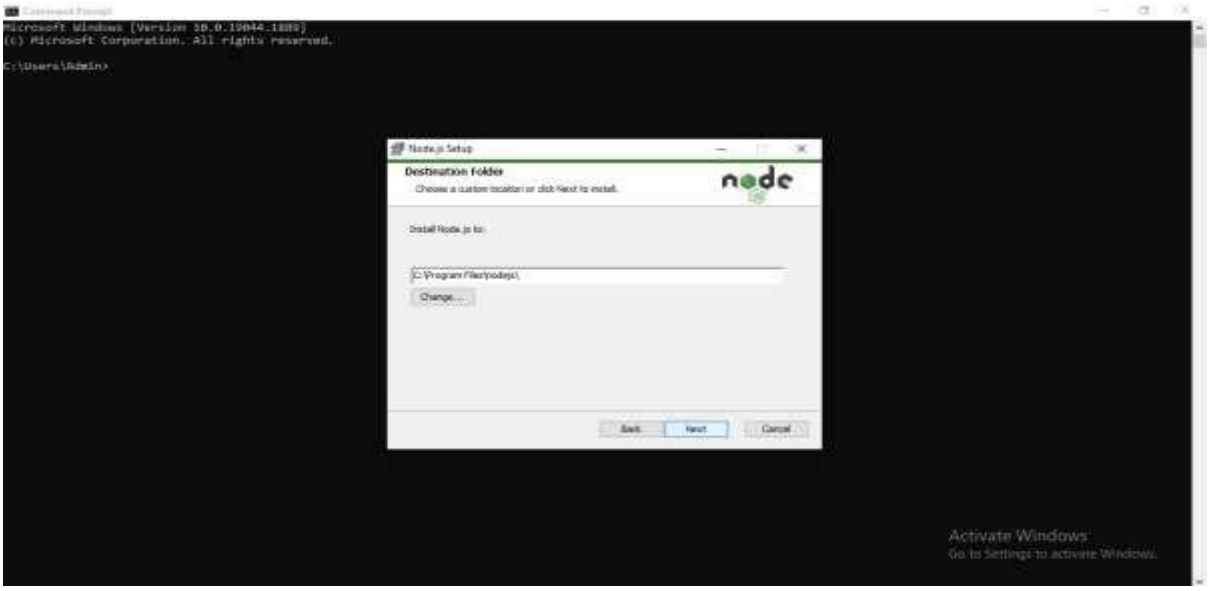
Back
Next
Cancel
Activate Windows
Go to Settings to activate Windows.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(c) Microsoft Corporation. All rights reserved.
C:\Users\Admin>
Node.js Setup
Destination Folder
Change...
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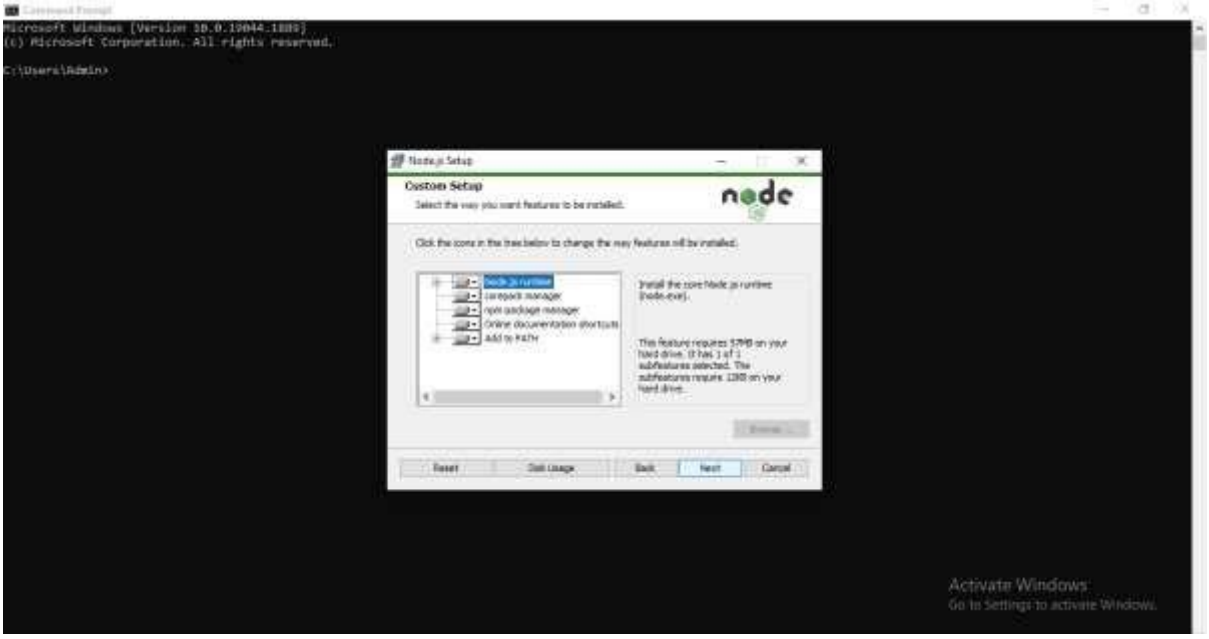
Next
Cancel
Activate Windows
Go to Settings to activate Windows.


Microsoft Windows [Version 10.0.19044.1889]
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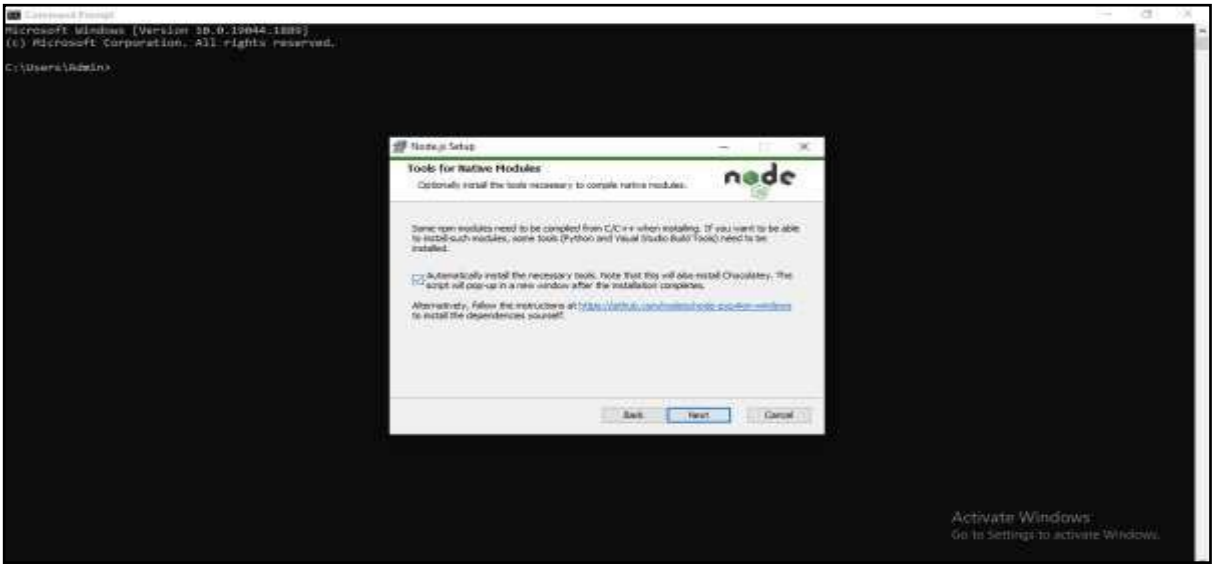
C:\Users\Admin>
Node.js Setup
Custom Setup
Select the way you want features to be installed.
Click the icons in the tree below to change the way features will be installed.
Node.js runtime
corepack manager
npm package manager
Online documentation shortcuts
Add to PATH
Reset
Disk Usage
Back
Next
Cancel
Activate Windows
Go to Settings to activate Windows.


Microsoft Windows [Version 10.0.19044.1889]
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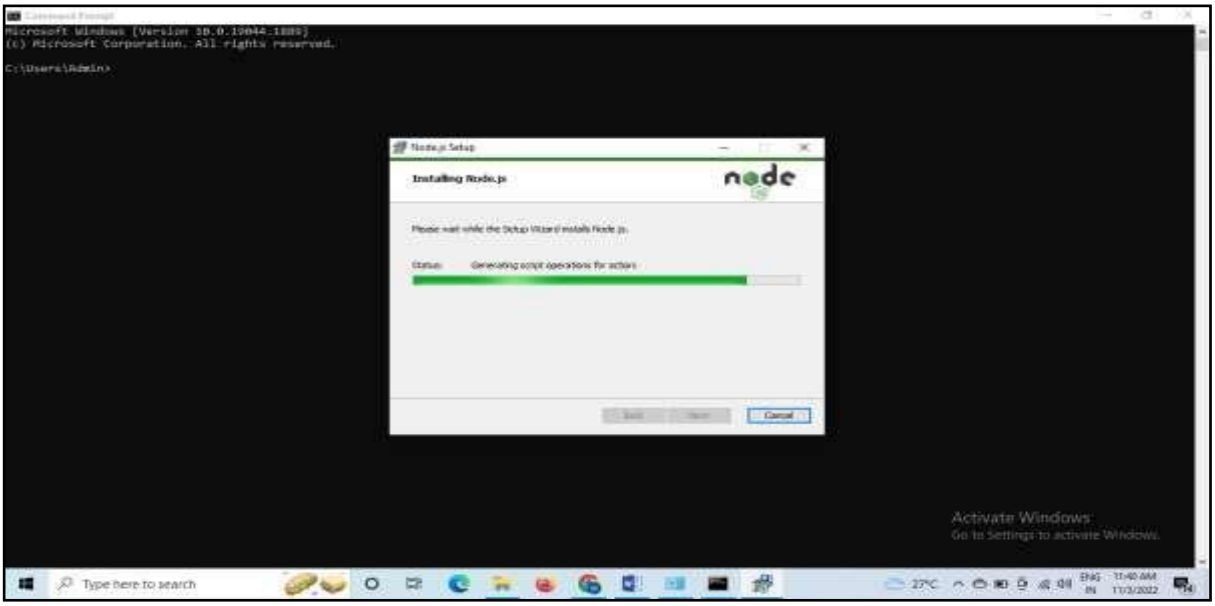
C:\Users\Admin>
Node.js Setup
Tools for Native Modules
Optionally install the tools necessary to compile native modules.
Some npm modules need to be compiled from C/C++ when installing. If you want to be able to install such modules, some tools (Python and Visual Studio Build Tools) need to be installed.
Automatically install the necessary tools. Note that this will also install Chocolatey. The script will pop up in a new window after the installation completes.
Alternatively, follow the instructions at https://github.com/nodejs/node-gyp#on-windows to install the dependencies yourself.
Back
Next
Cancel
Activate Windows
Go to Settings to activate Windows.


Microsoft Windows [Version 10.0.19044.1889]
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C:\Users\Admin>
Node.js Setup
Installing Node.js
Please wait while the Setup Wizard installs Node.js.
Status: Generating script operations for actions...
Back
Next
Cancel
Activate Windows
Go to Settings to activate Windows.
Type here to search
27°C
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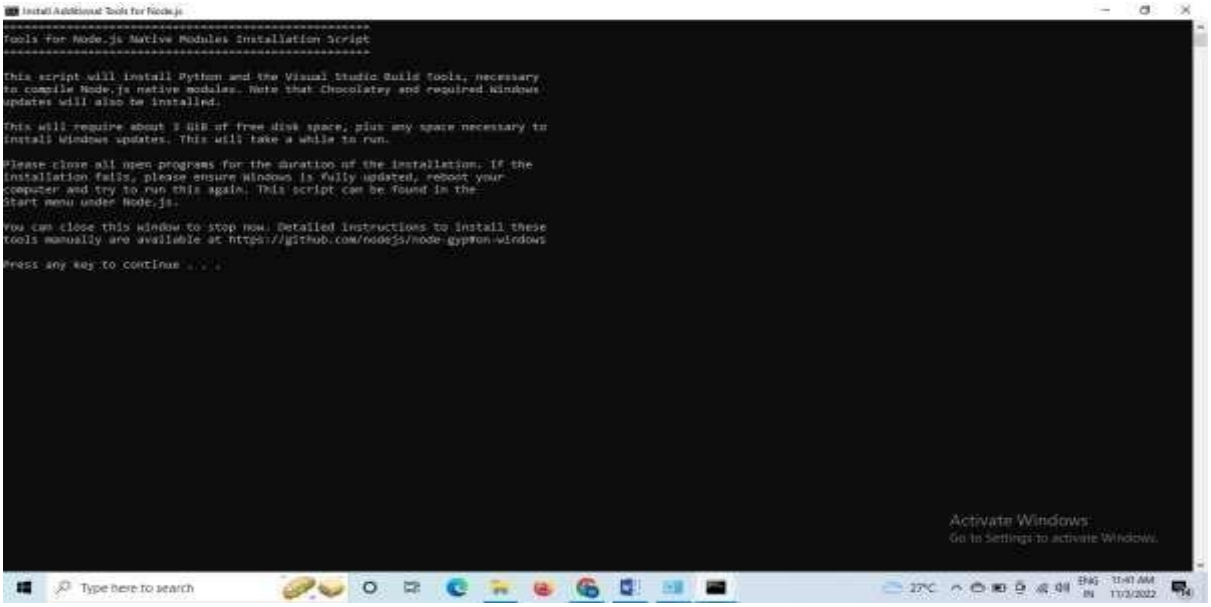
C:\Users\Admin>
Node.js Setup
Completed the Node.js Setup Wizard
Click the Finish button to exit the Setup Wizard.
Node.js has been successfully installed.
Finish
Activate Windows
Go to Settings to activate Windows.


Install Additional Tools for Node.js
Tools for Node.js Native Modules Installation Script
This script will install Python and the Visual Studio Build Tools, necessary
to compile Node.js native modules. Note that Chocolatey and required Windows
updates will also be installed.
This will require about 3 GiB of free disk space, plus any space necessary to
install Windows updates. This will take a while to run.
Please close all open programs for the duration of the installation. If the
installation fails, please ensure Windows is fully updated, reboot your
computer and try to run this again. This script can be found in the
Start menu under Node.js.
You can close this window to stop now. Detailed instructions to install these
tools manually are available at https://github.com/nodejs/node-gyp#on-windows
Press any key to continue . . .
Activate Windows
Go to Settings to activate Windows.
Type here to search
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ENG
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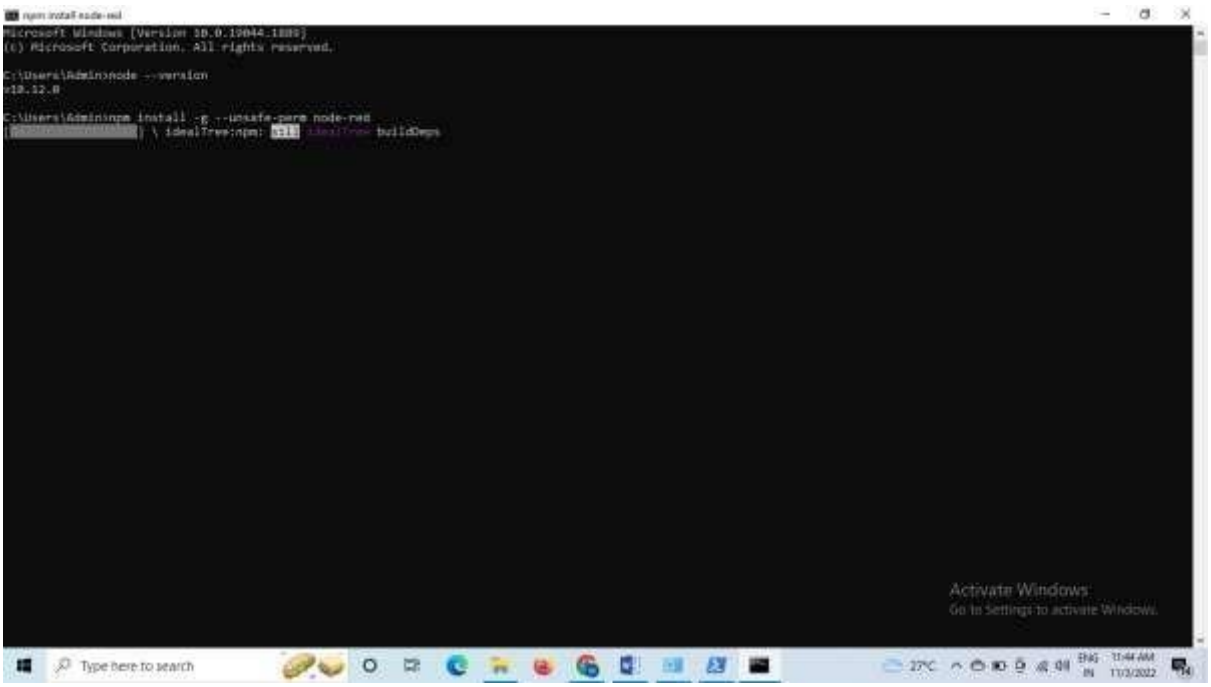
npm install node-red
Microsoft Windows [Version 10.0.19044.1889]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Admin>node --version
v10.12.0
C:\Users\Admin>npm install -g --unsafe-perm node-red
idealTree:npm: timing idealTree buildDeps
Activate Windows
Go to Settings to activate Windows.
Type here to search
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ENG
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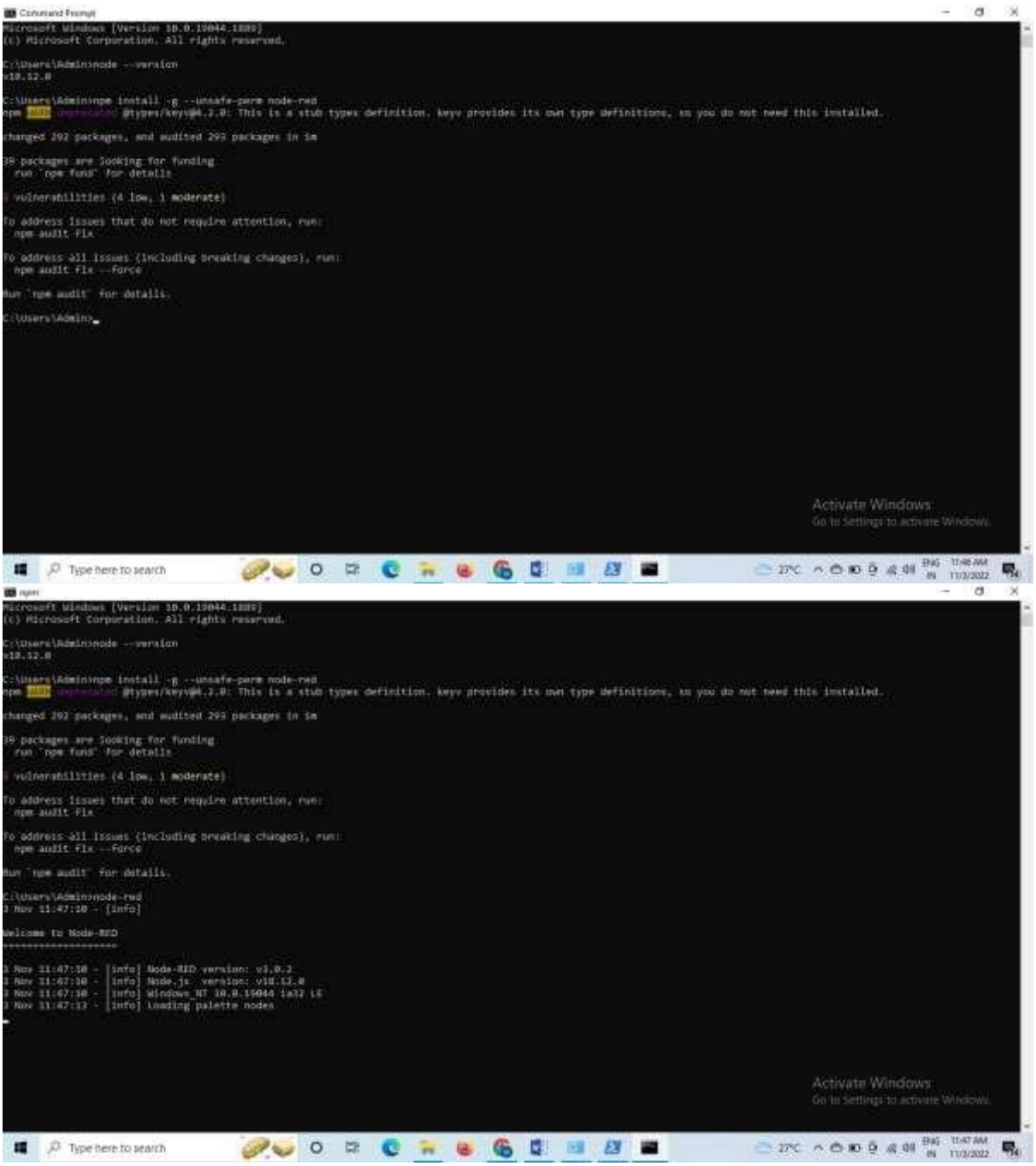
Command Prompt
Microsoft Windows [Version 10.0.19044.1889]
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C:\Users\Admin>node --version
v10.12.0
C:\Users\Admin>npm install -g --unsafe-perm node-red
npm WARN deprecated @types/keyv@4.2.0: This is a stub types definition. keyv provides its own type definitions, so you do not need this installed.
changed 292 packages, and audited 293 packages in 1m
38 packages are looking for funding
run `npm fund` for details
vulnerabilities (4 low, 1 moderate)
To address issues that do not require attention, run:
npm audit fix
To address all issues (including breaking changes), run:
npm audit fix --force
Run `npm audit` for details.
C:\Users\Admin>
Activate Windows
Go to Settings to activate Windows.
Type here to search
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ENG
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11:46 AM
11/3/2022

npm
Microsoft Windows [Version 10.0.19044.1889]
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C:\Users\Admin>node --version
v10.12.0
C:\Users\Admin>npm install -g --unsafe-perm node-red
npm WARN deprecated @types/keyv@4.2.0: This is a stub types definition. keyv provides its own type definitions, so you do not need this installed.
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To address issues that do not require attention, run:
npm audit fix
To address all issues (including breaking changes), run:
npm audit fix --force
Run `npm audit` for details.
C:\Users\Admin>node-red
3 Nov 11:47:10 - [info]
Welcome to Node-RED
3 Nov 11:47:10 - [info] Node-RED version: v1.0.1
3 Nov 11:47:10 - [info] Node.js version: v10.12.0
3 Nov 11:47:10 - [info] Windows_NT 10.0.19044 ia32 LE
3 Nov 11:47:13 - [info] Loading palette nodes
Activate Windows
Go to Settings to activate Windows.
Type here to search
27°C
ENG
IN
11:47 AM
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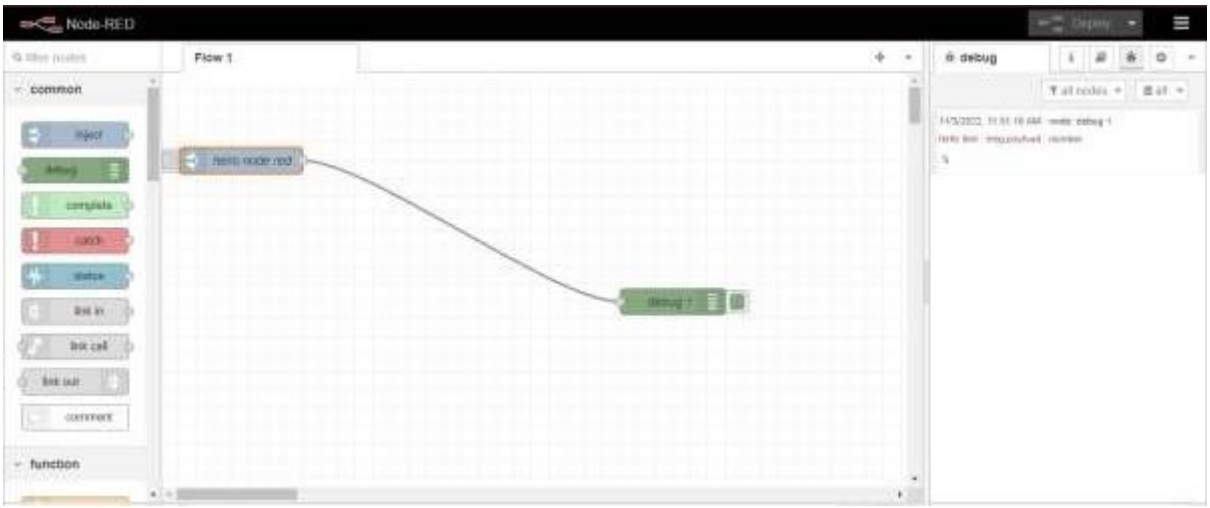

Thus we created NODE-RED Service.